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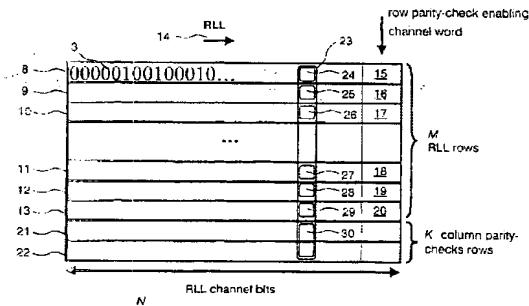
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(54) Title: SIGNAL, STORAGE MEDIUM, METHOD AND DEVICE FOR ENCODING, METHOD AND DEVICE FOR DE-CODING



WO 03/088501 A2

(57) Abstract: The invention relates to a signal comprising a runlength limited (RLL) encoded binary d,k channel bitstream 3, wherein parameter d defines a minimum number and parameter k defines a maximum number of zeroes between any two ones of said bitstream 3 or vice versa, comprising a number of sections of respectively N successive RLL channel bits, called RLL rows 8-13, 45, each RLL row 8-13, 45 representing a parity-check code-word, called row parity-check code-word, in which a so-called row-based parity-check constraint for said RLL row 8-13, 45 has been realized, characterized in that K sections of respectively N successive channel bits, called column parity-check rows 21, 22, 43, 44, 46, are located at predetermined positions of a group of M RLL rows 8-13, 45, K, N and M being integer values, said column parity-check rows 21, 22, 43, 44, 46 comprising a plurality of column parity-check enabling channel words 30, 42, 48, wherein each of said column parity-check enabling channel words 30, 42, 48 realizes a so-called column-based parity-check constraint for all so-called corresponding segments 24-29 of at least said M RLL rows 8-13, 45 of said group that correspond to a specific column parity-check enabling channel word 30, 42, 48, hereby constituting a column parity-check codeword. Furthermore, the invention relates to a storage medium comprising such a signal as well as a method and a device for encoding a stream of user data bits into such a signal as well as a method and a device for decoding such a signal.

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WO 03/088501 A2



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B. FIELDS SEARCHED

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, INSPEC, IBM-TDB, COMPENDEX, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	HILDEN H M ET AL: "Shift error correcting modulation codes". MAGNETIC RECORDING CONFERENCE TMRC91, HIDDEN VALLEY, PA, USA, 12-15 JUNE 1991, vol. 27, no. 6, pt.1, pages 4600-4605, XP002257621 IEEE Transactions on Magnetics, Nov. 1991, USA ISSN: 0018-9464 cited in the application the whole document ---	1-3, 5, 6, 13-16, 28-38, 47, 48
A	-/-	39

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	COENE W ET AL: "Channel coding and signal processing for optical recording systems beyond DVD" IEEE TRANSACTIONS ON MAGNETICS, IEEE INC. NEW YORK, US, vol. 37, no. 2, pt1, 14 August 2000 (2000-08-14), pages 682-688, XP002204220 ISSN: 0018-9464 figure 8 paragraph 'IV.A' ---	1-3, 5, 6, 13-16, 28-38, 47, 48
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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US 4796260	A 03-01-1989	NONE	

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